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**THE REVOLUTION IN MILITARY AFFAIRS: MANDATE FOR CHANGE OR
RECIPE FOR DISASTER?**

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Introduction

What is the correct development path for the future United States military? Is it huge investments or draconian cuts? Moderate organizational improvements or wholesale restructure? There are at least as many views as there are political leaders, and when our brightest minds disagree, what course do we take? Who's opinion do we adopt as the right one? Many historians will look back at Napoleon and marvel at his genius. But was it genius, or did he simply choose a strategy that fit his capabilities and practice, and then work hard to make it successful? Consider the very first time he concentrated his cannon fire on that central point in his enemy's line and then surged through the breach. If his opponent had sufficient strength to close around Napoleon's forces and crush them, would we be reading about him today? Perhaps not.

Two well-respected strategic thinkers of our time are Michael O'Hanlon and Admiral Bill Owens, one a respected academic, and the other a respected military leader. Both offer opinions on the concept and promise of a Revolution in Military Affairs, and the potential it holds for our future military.

Overview of *Technological Change and the Future of Warfare*, by Michael O'Hanlon

In his book, O'Hanlon examines the concept of a Revolution in Military Affairs (RMA) and the popular thought that the U.S. military currently stands on the brink of such an event driven by dramatic advances in technology; primarily electronics and computers. While recognizing the promise of these evolving technologies, O'Hanlon does not share the popular

view that the U.S. is ready for, nor should it pursue, a true revolution in military affairs. In fact, he offers a number of technical, tactical, and strategic arguments against pursuing what he sees as an extremely expensive course of action that promises only dubious results given the evolving character of war. Although his effort predated the terrorist attacks of September 11th, his views most accurately reflect this new character of warfare and justifiably question the value of expensive new platforms designed to defeat an enemy with a capability and capacity comparable to our own.

Revolution in Military Affairs and Evolving Technologies

O'Hanlon accepts that revolutions in military affairs do happen and that their "implications for war-fighting and international security can be dramatic."¹ At the same time he recognizes that many other factors including institutional resistance and political considerations are equally important to the successful adoption of new methods or capabilities.

In chapters 3 and 4 of his text, O'Hanlon conveys that he clearly understands the potential impact of evolving technologies. He discusses the current state-of-the-art in sensors, computers, communications, vehicles, ships, aircraft, and weaponry, and how those technologies will evolve over the next twenty years. His method of projecting these trends included research of available technical literature weighed against the basic laws of physics. His assessment suggests that rapid progress in the areas of computers and communications technologies will continue with computers becoming "faster, cheaper, lighter and more widely used on the battlefield."²

¹ O'Hanlon, Michael, *Technological Change and the Future of Warfare*, Brookings Institute, Washington, D.C., 2000, p. 31

² Ibid. p. 64

In his discussion of propulsion, a capability component that could hold great promise for a revolution in military affairs given our focus on force projection, O'Hanlon sees no significant breakthroughs on the horizon in the next twenty or so years. While he accepts that the constraints on our ability to move and support large numbers of combat forces may ease in the future, they will not fundamentally change in nature nor will they disappear. Further, he suggests; "Joint Vision 2010's goal of full-dimensional protection also appears too optimistic. Missile defense technologies are improving, for example, but only gradually and hardly enough to eliminate this type of threat to U.S. forces."³ Thus, while our capabilities will continue to evolve, he expects no revolutionary change.

O'Hanlon summarizes the current RMA hypothesis as four specific technological premises and two sweeping conclusions about the future of warfare. The technological premises are that, "first, improvements in computers and electronics will make possible major advances in weapons and warfare, second, sensors will become radically more capable, and third, land vehicles, ships, rockets, and aircraft will become drastically lighter, more fuel efficient, faster, and more stealthy."⁴ These premises lead to two broad conclusions. First, "if properly exploited and integrated into military organizations, tactics, and concepts of operations, these technical trends will soon add up to a revolution in military affairs," and second, "even relatively weak U.S. adversaries will greatly improve their capabilities by acquiring and learning to make good use of advanced [technologies]."⁵ While he does not question the potential for technological

³ Ibid. p. 104

⁴ Ibid. p. 106

⁵ Ibid. p. 107

advances, he offers that the “fundamental limitations,” i.e., physics, will be “hard or impossible to overcome.”⁶

O’Hanlon’s Conclusions

O’Hanlon concludes that the current belief in a revolution in military affairs is “unconvincing,” and the technological basis for a radical RMA is “unsubstantiated.”⁷ He also suggests that the costs of modernization that our potential enemies would incur in an effort to match our capability would be prohibitive, and thus modest increases on our part should be sufficient to maintain our technological edge. Yet, while O’Hanlon does not see capability changes that qualify as a true RMA, he does note several areas worthy of investment; areas that he calls our “Achilles heel.” He specifically suggests that we focus on enhancing and ensuring allied interoperability, avoid complacency about the invulnerability of our communications and electronics systems, provide for radiation hardening of our systems, and finally, resist the temptation to expend our modernization dollars on major weapons platforms.

Although he does not support the popular concept of an ongoing RMA, he does believe that the United States has the potential to consolidate a revolution in “geo-strategic affairs,” and that this potential is “even more historic, and more important, than [our] purported ability to again revolutionize warfare.”⁸

⁶ Ibid. p. 139

⁷ Ibid. p. 192

⁸ Ibid. p. 197

Overview of *Lifting the Fog of War*, by Admiral Bill Owens

Arguably at the other end of the RMA spectrum is Admiral Bill Owens, a stalwart proponent of what he sees as a great opportunity that is fast slipping through our collective fingers. In his book, co-written with Ed Offley, Owens focuses on the computer revolution as the prime enabling factor in the current RMA; a factor with the capability to, in effect, lift the fog of war. Owens sees the RMA as a compilation of three key concepts: 1) Battlespace Awareness, 2) Command, Control, Communications, Computers, and Intelligence (surprisingly he omits Surveillance and Reconnaissance), and 3) Precision Force.⁹

In his introductory remarks Owens offers the opinion that “the U.S. military as a whole has failed to realize the promise of the Revolution in Military Affairs.”¹⁰ Like O’Hanlon, Owens recognizes that high technology alone will not achieve the potential benefits of a true RMA, but unlike O’Hanlon, he believes that high technology coupled with a thorough reexamination (and adjustment) of the size, force structure, and roles and missions of the services will allow us to reap those benefits. The primary purpose of his book is to convince the reader of the critical necessity of expanding and accelerating what he sees as the on-going revolution in military affairs.

The RMA in Context

In the first three chapters of his book, Owens defines the United States as an “exhausted superpower,” describes the historical context leading up to what he sees as a current revolution in

⁹ Owens, Bill and Offley, Ed, *Lifting the Fog of War*, The Johns Hopkins University Press, Baltimore, 2000, pp. 15-16

¹⁰ Ibid. p. 22

warfare, and outlines the technological basis for his assumptions. Although confident in the current capability of our armed forces, he sees those same forces as “stretched near the breaking point by multiple crises and peacekeeping operations.”¹¹ And this was his view prior to our current offensive against global terrorism. Owens goes so far as to suggest that without a concerted effort we will see a “major dissolution of American military strength-and perhaps even a total collapse of our military capability- within the next ten to fifteen years.”¹²

A Stalled Revolution

In chapters four and five, Owens offers detailed reasoning for why we have thus far failed to reap the benefits of what he sees as the current RMA. He recounts the history of the management and budgeting process over the last 50 years and lays the blame for this failure squarely at the “feet” of military service unilateralism and parochialism, stating that “military service unilateralism ruled the U.S. armed forces throughout the Cold War,” and it continues to this day.¹³

In further support of his thesis, Owens performs an analysis of the NATO operations in Kosovo and describes how and to what degree the technology driving the current RMA was utilized in that campaign. This historical review of the Kosovo campaign supports Owens’ position that technology alone cannot remake the U.S. military; a thorough reorganization of military structure and leadership is equally necessary.

¹¹ Ibid. p. 25

¹² Ibid.

¹³ Ibid. p. 159

Owens' Recommendations for the Future

In his final chapter, Owens offers specific recommendations for capitalizing on this latest revolution in military affairs. He provides five basic recommendations including: 1) creating a Unified Command Structure that would have the service chiefs relinquish the power to set individual service priorities and goals for weapons and equipment research and procurement; 2) forming Unified Military War-Fighting Organizations by what tasks they perform in battle rather than by what service branch they come from; 3) deploying an Embedded Information Warfare Capability that would allow each force level the ability to define itself and its combat capabilities through superior information technology; 4) flattening the hierarchy by evolving from the Command Chain to the Command Network; and 5) fostering Cultural Harmony by unifying the military schools under a single organization thus ensuring the military as a whole would be trained and educated with a common joint military doctrine for both combat and peacetime operations.¹⁴

Similar Views with Differing Perspectives

In the introduction to this paper I noted that O'Hanlon and Owens were on opposite ends of the RMA spectrum. That is not entirely correct. Both see the potential benefits of a true RMA, but they do not agree on the necessity for one, nor the approach to get there. O'Hanlon sees a true RMA as an expensive thing, fraught with peril for our capable and proven forces, while Owens sees it as our only salvation in a fast-paced world that is quickly eroding our technological lead. Two respected strategic thinkers who disagree. So what course do we take?

¹⁴ Ibid. pp. 205-206

Summary

It is not self-evident what constitutes a revolution, at least not at the time the so-called revolution takes place. Assessments of this kind are best left to future historians as we seem to invest too much time, energy and resources into qualifying our recommendations in order to fit them into some historical context that lends them greater credibility. Defense Secretary Donald Rumsfeld presents a slide with Special Forces personnel on horseback and holds this up as an example of innovation and transformation.¹⁵ If that is truly the case then I fear we are headed in the wrong direction. The ability to adapt on the battlefield is an example of neither innovation nor transformation; it's an example of soldiers doing their jobs, using whatever tools are available to seek out and engage the enemy, the same as it's been for thousands of years.

While understanding history and learning its lessons holds great value for strategists and war-fighters alike, we too often ignore ideas simply because we find little historical relevance upon which to anchor them, and neither can we afford to artificially force those ideas into some historical context simply to lend them greater credence.

Whether you call it a revolution, and evolution, or just “change two to plan C,” both of these writers make excellent points about our future needs and capabilities. Their ideas and thoughts should be considered independent of the existence or non-existence of an RMA. O'Hanlon calls for improving our allied interoperability, strengthening the security and radiation hardening of our communications and electronics systems, and investing our modernization dollars more on joint war-fighting capabilities and less on new major weapons platforms; all good ideas. Owens on the other hand focuses more on the structure of our forces, calling for an emphasis on better interservice cooperation, removing the ability of the services to conduct

¹⁵ Rumsfeld, Donald, Comments to the National Defense University, 31 January 2002

independent research, development and acquisition, and the integration of the disparate training institutions that perpetuate the continued use of separate tactics and doctrine which inhibit true joint operations; these too, are good ideas. But there are striking differences in their views as well.

O'Hanlon promotes incremental change, with minimized costs while Owens supports a wholesale reorganization of the Defense Department, at some unknown but assumedly high cost. O'Hanlon maintains current capabilities with small enhancements whereas Owens shakes the very foundations of our service structures. As both make good points in their arguments, who then has the best approach?

O'Hanlon's approach suffers from too little too late. With technology changing at such a rapid pace our future adversaries have the opportunity to avoid the same gargantuan investments the U.S. has made over the years. By example, many developing nations are opting for cellular systems over the installation of "land lines" at a significant national savings. Thus, by investing a fraction of what we've invested over the years, these nations will soon have similar capabilities to our own in many key areas such as command, control, and communications. Nor does O'Hanlon's approach address what I see as the greatest impediment to the efficiency and effectiveness of our military operations; that is the perpetuation of processes unique to each service. While there is great value in the different capabilities and cultures of our services, there is also great waste, primarily in the areas of acquisition and training.

On the other hand, Owens' approach is too grand. While it would be nice to stop the world for a few years to implement his ideas, it's neither physically possible nor politically feasible. I believe his toughest recommendation, the hardest to execute politically, is to completely remake the force structure. But some of his other ideas, specifically his renovation of the acquisition and

training systems, could be accomplished without causing an immediate loss of capability. Further, if these changes could be accomplished, I believe other changes (enhanced joint operational capability) would naturally follow without traumatic upset. So perhaps an “Owens” (dramatic) approach in a few areas followed by an “O’Hanlon” (incremental) approach in a few others is the right recipe.

What is abundantly clear is the need for change. With the exorbitant cost of the War on Terrorism that we are now bearing, something will have to give, and give soon. Some have seen this war as a great opportunity to affect the future world order and to further the ideals of democracy around the globe. Perhaps this too is an opportunity to begin the much-needed process of reshaping our military forces for the future. But a revolution in military affairs...I’ll leave that characterization to the analysis of future historians.